

Information and Communication Technology



Grade 4
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ICT Department | Computer & Information Technology

Grade 4 Class Booklet – Second Semester

Educational Directorate: Talkha Educational Administration

School:

Student Name:

Class:

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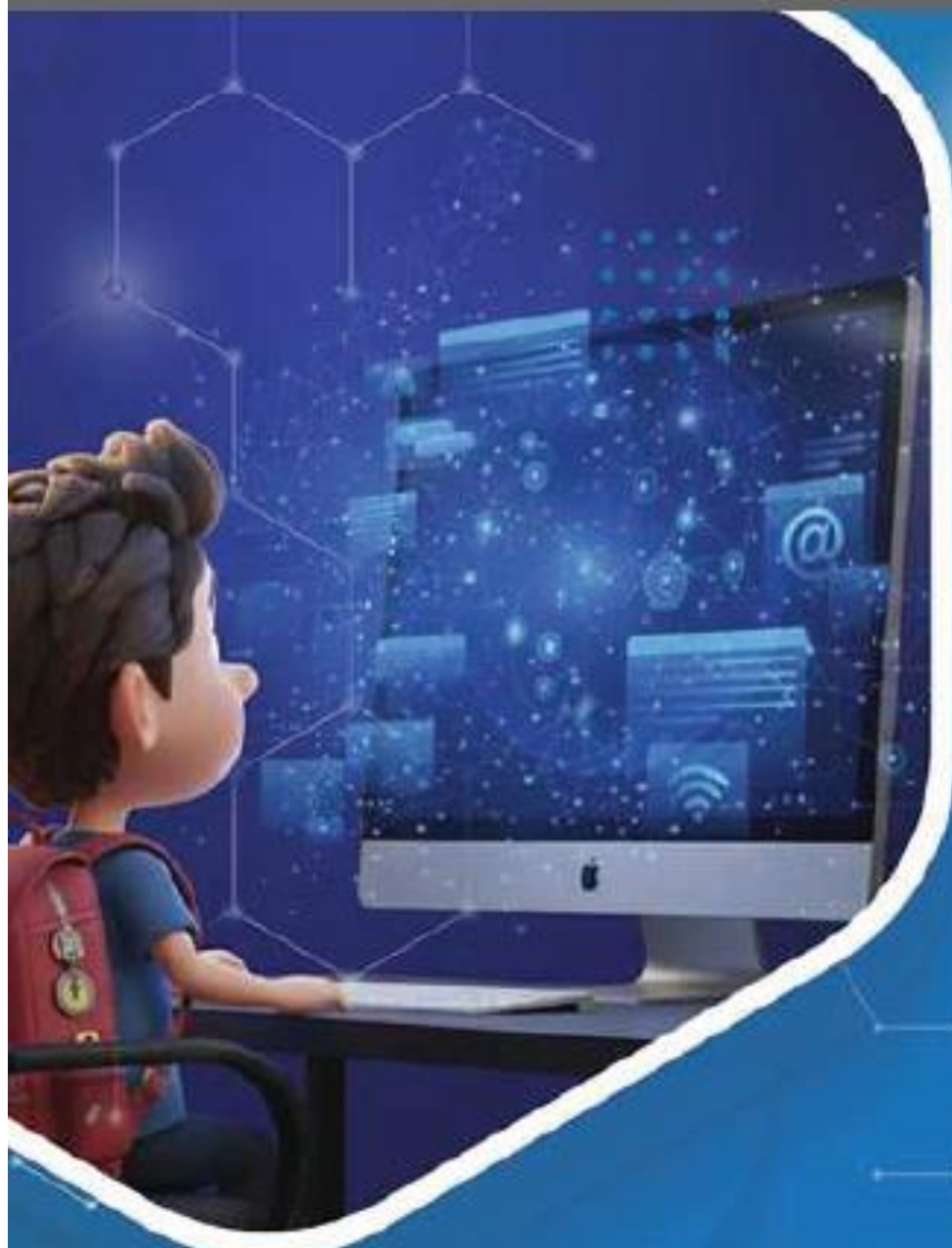
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Unit 3:

The Digital Citizen in an Online World

Unit 3: The Digital Citizen in an Online World

Lesson 1: Technological Applications in Our Daily Lives

Welcome, friends! Have you ever thought about how technology helps us do so many things in our lives easier and faster? Like shopping, communicating with relatives, or learning! Together, we will learn how these tools are useful to us and the society around us.

How Do Digital Tools Help Us?

There are creative people who use different types of digital tools to innovate practical solutions that help people in their daily lives. They work on designing useful applications and websites. Examples of this help include:

1. **Facilitating Access to Services:** They help us have easy access to services

If it is difficult to pay a bill, you can use an app to access the service you need

1. **Travel and entertainment have become easier::**

- You can book tickets for trains and airplanes online.
- You can book tickets to visit museums and historical places online
- Useful information has become easily accessible to everyone.

2. **Improving Communication:** Technology helps people communicate better ,build good relationships, and solve problems

The Main Idea:

When we use technology in a positive way, it helps us become more successful in our lives and helps communities develop and grow.

Practical Application:

Dear student, with the help of your teacher, explore the websites and services provided by the **Egyptian State** to citizens online:

- Booking train tickets.
- Bibliotheca Alexandrina (Library of Alexandria)
- The Grand Egyptian Museum website (...).



Exercises on Lesson

Q1: Put (✓) or (✗):

- | | | |
|----|---|---------|
| 1 | Digital tools can be used to find solutions to daily problems | () |
| 2 | Technology makes paying bills more difficult. | () |
| 3 | We can use applications to get help from the right organizations. | () |
| 4 | Booking airplane tickets cannot be done online | () |
| 5 | Digital tools have simplified the process of booking museum tickets | () |
| 6 | Technology always harms people and never benefits them | () |
| 7 | Good communication between people helps in building good relationships | () |
| 8 | Information has become more difficult to obtain because of the internet | () |
| 9 | Communities can benefit from digital solutions | () |
| 10 | Digital tools make it easier for us to accomplish daily tasks | () |

Q2: Choose the correct answer:

1- What is the main goal of using digital tools?

- | | |
|---|---------------------------------------|
| a. To make life more difficult. | b. To simplify tasks and help people. |
| c. To prevent communication between people. | d. To waste time. |

2- How can a digital application help someone?

- | | |
|-----------------------------|--|
| a. To sing for them. | b. To get assistance from the specialized institution. |
| c. To buy clothes for them. | d. To take them to school. |

3- Which of these examples shows how technology has made travel easier?

- | | |
|--------------------------|----------------------------------|
| a. Going to the library. | b. Booking plane tickets online. |
| c. Playing in the park. | d. Drawing on paper. |

4- One of the benefits of websites is:

- | | |
|---|--|
| a. Making information easily available to everyone. | b. Preventing people from talking to each other. |
| c. Making the weather hot. | d. Increasing the difficulty of shopping. |

5- What do we achieve when we use technology in a positive way?

- | | |
|-------------------------------------|--|
| a. Causing problems for others. | b. Helping to achieve success and development. |
| c. Preventing people from learning. | d. Making life more difficult. |

6- Which of the following is considered a digital tool?

- | | |
|------------------------------------|----------------------|
| a. A paper book. | b. A pencil. |
| c. An application on a smartphone. | d. A paper magazine. |

7- What financial problem can be solved using digital applications?

- | | |
|---------------------------------|--------------------------------|
| a. Difficulty in cooking. | b. Difficulty in paying bills. |
| c. Difficulty in riding a bike. | d. Difficulty in sleeping. |

8- What can we book tickets for online?

- | | |
|---|---------------------------------------|
| a. Visiting museums and archaeological sites. | b. Buying vegetables from the grocer. |
| c. Playing with a ball. | d. Swimming in the sea. |

9- How does technology help improve communication between people?

- | | |
|---|---|
| a. It stops people from talking. | b. It facilitates building good relationships and solving problems. |
| c. It makes communication more difficult. | d. It increases misunderstandings between people. |

10- What is the benefit of applications designed to serve the community?

- | | |
|---------------------------------------|--|
| a. Wasting time and money. | b. Helping communities develop and solve their problems. |
| c. Increasing the difficulty of life. | d. Preventing people from helping each other. |

Fourth Grade - Weekly Assessment and Assignments - Week (1)

Weekly assessment

First Test

Tick (✓) in front of the correct statement and (x) in front of the wrong one

1- You can use the ICT tools to find solution to the daily problems ()

2- You cannot booking planes tickets through the internet ()

Second test

One Tick (✓) in front of the correct statement and (x) in front of the wrong one

1- The ICT tools helps in booking tickets to visit the museum ()

2- Information is being more difficult to find cause of internet

Third Test

Tick (✓) in front of the correct statement and (x) in front of the wrong one

1. ICT tools help in doing our daily tasks ()

2. Technology is always harmful for people and don't useful ()

Class evaluation

Dear student... by the help of your teacherreview the websites and services provided by the Egyptian government to citizens on the Internet (booking train tickets - Library of Alexandria - website of the Grand Egyptian Museum...)

Homework

1- Which of the following is considered digital tool

- a- printed book
- b- b- pencil
- c- app in smart phone
- d- d- printed magazine

2- One of the following show how technology facilitated travelling

- a- go to library
- b- booking plans tickets through the internet
- c- playing in garden
- d- drawing in paper

Lesson 2: Digital Citizenship: My Rights and Responsibilities on the Internet.

Are you ready to be a good digital citizen? Now that you use technology and the internet in your studies and play, you are not just a normal user, you are a digital citizen.

Digital Citizenship:

It is your ability to use technology in an ethical, responsible, and safe manner. This means you know your rights and duties (responsibilities) on the internet.

Your Digital Footprint... Record of your actions:

Did you know that everything you do online leaves a trace?

This trace is called the **Digital Footprint**.

- **Digital Footprint:** It is everything you do, share, or others share about you online (such as websites you visit, photos you post, or comments you write).
- **Remember:** It is very important that your digital footprint is positive. Therefore, you must not share your information or others' information in an unsafe or irresponsible way.

Your Digital Rights and Responsibilities:

Just as you have rights at school and home, you have rights and responsibilities on the internet:

Your Rights (What you get)	Your Responsibilities (What you must do)
Right to Protection: No one may copy your digital footprint or share videos/photos of you without permission.	Respect Intellectual Property: Do not copy or steal others' content (like stories or songs) to share or sell. Avoid Piracy!
Right to Positive Expression: You have the right to express your opinions and ideas positively without offending others.	Positive Interaction: Be polite with everyone online and express opinions with positive ideas.
Right to Safe Access: You have the right to use the internet safely when needed, respecting the law.	Wise Use: Ensure what you watch is useful and balance your time between internet and family/friends.

Safe Usage Rules:

1. Use strong passwords.
2. Don't believe everything you find; verify sources.
3. Monitor the time you spend online.

Practical Application:

Dear student... Using Microsoft Word, write a short topic about "How do I keep my digital footprint clean and positive?".



Exercises on Lesson

Q1: Put (✓) or (X):

- 1 Digital Footprint is everything you do online, and it is important for it to be a positive footprint ()
- 2 Digital Citizenship is just knowing how to use a computer ()
- 3 If you upload a video you designed, you have the right to request protection against piracy ()
- 4 It doesn't matter if you use a weak password as long as you don't share it ()
- 5 Piracy means copying someone else's content with the aim of sharing or selling it ()
- 6 You don't need to document the references you find online; they are all correct ()
- 7 It is your responsibility to ensure that the content you watch does not cause you stress ()
- 8 You can express your opinions online in any way, even if it offends others ()
- 9 You have the right to use the internet when you need it, but while respecting the law ()
- 10 You should choose the websites you visit wisely and use updated software ()

Q2: Choose the correct answer:

1. What is the correct definition of Digital Citizenship?
 - a. Spending a long time on the internet.
 - b. The ability to use technology in an ethical, responsible, and safe manner.
 - c. Only watching videos.
 - d. Sharing all personal information.
2. The things you do online that leave a trace are called:
 - a. Password.
 - b. Rights.
 - c. Responsibilities.
 - d. Digital Footprint.
3. One of the most important responsibilities towards online content is
 - a. Posting it immediately.
 - b. Respecting intellectual property rights and avoiding piracy.
 - c. Not documenting any references.
 - d. Using it to harm others.
4. When interacting with others online, you must
 - a. Express your opinions offensively.
 - b. Ignore them.
 - c. Show positive behavior and treat them with respect.
 - d. Ask for their personal information.
5. What should you do when you find information in your research?
 - a. Ignore the source.
 - b. Use it without asking.
 - c. Confirm, evaluate, and document the references you find.
 - d. Post it immediately as if it were correct.
6. Which of the following is one of your rights as a digital citizen?
 - a. Stealing content from the internet.
 - b. The right to protection and that your digital footprint is not copied without your permission.
 - c. Neglecting your time with family.
 - d. Posting photos of others.
7. What does using the internet safely mean
 - a. Using a simple password.
 - b. Visiting any random website.
 - c. Using updated software and setting strong passwords.
 - d. Not monitoring the time you spend.
8. What results from not respecting intellectual property rights?
 - a. Positive interaction.
 - b. Documenting references.
 - c. Piracy.
 - d. A clean digital footprint.
9. What is an example of responsibility when using the internet?
 - a. Expressing your opinion.
 - b. Ensuring a balance between internet use and personal communication.
 - c. Using technology only when needed.
 - d. Watching anything randomly.
10. It is very important not to share your information or the information of others online in a way that is:
 - a. Responsible.
 - b. Unsafe and irresponsible.
 - c. Safe.
 - d. Positive.

Fourth Grade - Weekly Assessment and Assignments - Week (2)
Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 3: Methods of Communication on the Internet (Synchronous and Asynchronous)

How do we communicate in the world of technology? Have you ever thought about the different ways you talk to your friends or your teacher using technology? There are two main ways to communicate online, and both are very useful!



1- Synchronous Communication

Communication Tool	How does it work?	Required Tools
Video Chats	Allows direct communication with one or more people, where you see and hear each other instantly.	A device equipped with a camera and microphone, and a mobile app or computer software.
Instant Messaging (IM)	Enables you to send text messages, images, or videos that arrive instantly.	Instant messaging software on a computer or a mobile application.
Chat Rooms	Allows text-based communication within groups about a specific topic, where responses are fast.	An internet browser (like Google Chrome) or a mobile application.

2. Asynchronous Communication

This type of communication does not require an immediate response. You can send your message, and the other person can read and reply to it at any time later.



- **What is it?** Communication that does not require an immediate response; information is transferred without the need for everyone to be online at the same time.

Communication Tool	How does it work?	Required Tools
Email	Used to send formal messages or large files. It doesn't require the person to be online.	An email service (like Gmail or Outlook) via a browser or an app.

When do we use each type?

Communication Type	When to use it
Synchronous	When discussing a quick school topic, needing an immediate answer, or exchanging simple information and files rapidly.
Asynchronous	When sending a formal message, sending important or large files (like homework), or when you don't need an instant reply.

Practical Application:

Dear student: Send a file using one of the communication applications: (E-mail, WhatsApp, etc.).

Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- **Synchronous communication** happens in real-time and requires an immediate response. ()
- 2- **Email** cannot be used to communicate with a teacher regarding a school project. ()
- 3- **Email** is an example of asynchronous communication. ()
- 4- For **synchronous communication**, both parties must be online at the same time. ()
- 5- **Chat rooms** can be used to discuss a specific educational topic. ()
- 6- **Instant Messaging (IM)** is considered an asynchronous communication tool. ()
- 7- Web browsers like **Google Chrome** can be used to access chat rooms. ()
- 8- **Asynchronous communication** requires an immediate response from the other party. ()
- 9- **Video chats** allow direct communication with one or more people. ()
- 10- A **mobile application** cannot give you access to video chats. ()

Q2: Choose the correct answer:

1. What type of communication happens in real-time and requires an immediate response?

- | | |
|-------------------------------|--------------------|
| a. Asynchronous communication | b. Email |
| c. Synchronous communication | d. Regular mailing |

2. Video chats are an example of which type of communication?

- | | |
|-------------------------------|------------------------------|
| a. Asynchronous communication | b. Traditional communication |
| c. Synchronous communication | d. Recorded messages |

3. The best way to send a formal message to your teacher or government entities is:

- | | |
|---------------------------|----------------|
| a. Instant Messaging (IM) | b. Video chats |
| c. Email | d. Chat rooms |

4. Chat rooms are often used to:

- | | |
|-------------------------------------|---|
| a. Have long personal conversations | b. Send formal assignments |
| c. Make phone calls | d. Discuss a specific educational topic or idea |

5. Which of the following tools does not require you and the recipient to be online at the same time?

- | | |
|---------------------------|--------------------------|
| a. Instant Messaging (IM) | b. Video chats |
| c. Email | d. Live television calls |

6. What tool is required to conduct video chats?

- | | |
|------------------------|---|
| a. Audio recorder only | b. A device equipped with a camera and microphone |
| c. A fax machine | d. Pen and paper |

7. Synchronous communication allows you to:

- | | |
|--|---|
| a. Send a long formal message | b. Send a file and receive a reply the next day |
| c. Read educational articles | |
| d. Exchange information and files between two or more people without delay | |

8. A mobile application is a program running on a device that gives you direct access to:

- | | |
|-----------------------------|---|
| a. Cooking and recipes only | b. Email, social media pages, and video chats |
| c. Paper textbooks | d. Physical sports |

9. What type of communication is used to send a digital file or a recorded educational program?

- | | |
|------------------------------|-------------------------------|
| a. Synchronous communication | b. Asynchronous communication |
| c. Video chat | d. Instant Messaging (IM) |

10. Instant Messaging (IM) is an example of:

- | | |
|-------------------------------|------------------------------|
| a. Asynchronous communication | b. Synchronous communication |
| c. Official formal email | d. Slow correspondence |

Fourth Grade - Weekly Assessment and Assignments - Week (3)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 4: Digital Communication Tools.

In the previous lesson, we learned about the types of communication (**Synchronous** and **Asynchronous**). Now, let's learn how to use each tool correctly and responsibly, which is known as **Online Etiquette**.

1. Conducting Video Chats

Imagine you are in a virtual classroom! Here are some important rules to appear

- **Camera and Microphone:** When starting a chat, ensure your microphone organized and polite; and camera are turned on (after obtaining permission).
- **Respect Others:** When someone else is speaking, mute your microphone. This prevents background noise from reaching others.
- **Appropriate Appearance:** If the camera is on, wear suitable clothes and behave as if you are in a public place.
- **Safe Background:** Ensure that nothing in your background (such as your home address or personal information) can be seen by other participants.
- **How to Join:** You must click the link and then wait for the host (the person in charge) to allow you to "Enter" the chat.



2. Instant Messaging and Chat Rooms

This is a fast and fun way to communicate, but we must stay polite:

- **Be Polite:** Whether you are in a chat room or sending an instant message, stay polite and positive in your speech.
- **Use Short Phrases:** Instant messaging is an informal way to communicate where you can use short phrases instead of full sentences.
- **Maintain Ethics:** You can use emojis and images, but always maintain high ethical standards when dealing with others.
- **Remember:** Anyone with access to the chat room will be able to read your message.

3. Using Email

Email is the best tool for more **formal** situations, such as messaging your teacher or dealing with an official entity.

- **Writing Addresses:**
 - Write the recipient's email address in the "**To**" field.
 - Provide clear information about the message topic in the "**Subject**" line (e.g., *Digital Citizenship Assignment*).

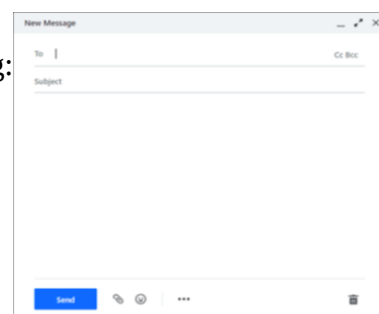
Dear Student... When messaging your teacher or a friend, follow these steps:

- **Follow the Rules:** When writing the message, make sure to use correct grammar.
- **Greeting and Closing:** Be polite and clear. Start your message with a greeting and end it with a closing remark.
- **Check Attachments:** If you are sending files (attachments), ensure they are safe, accurate, virus-free, and correct.

Practical Application

Dear Student: Write a short formal email to your teacher including the following:

- **Subject:** Inquiry about the unit project submission date.
- **Content:** Start with an appropriate greeting, ask for the project deadline, and end with a suitable closing (e.g., *Thank you for your time, Best regards*).



Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- When conducting a video chat, you must behave as if you are in a public place. ()
- 2- Instant messaging is a formal method where full sentences are used. ()
- 3- An email must contain polite greetings and closing remarks. ()
- 4- You can leave the camera open in video chats even if you are not wearing appropriate clothes. ()
- 5- Email is suitable for messaging your teacher or your school principal. ()
- 6- It is important to mute your microphone when not speaking in video chats. ()
- 7- You can use emojis and images in instant messages. ()
- 8- The "To" field in an email is designated for writing the message subject. ()
- 9- In chat rooms, your message is private and only seen by the recipient. ()
- 10- It is important to ensure that the attachments you send via email are safe and accurate. ()

Q2: Choose the correct answer:

1- If you are in a video chat with your peers, when should you mute your microphone?

- a. When entering the chat.
- b. When leaving the chat.
- c. When it is someone else's turn to speak.
- d. Throughout the entire duration of the chat.

2. Instant Messaging (IM) is considered a _____ communication method.

- a. Very formal
- b. Complex
- c. Informal
- d. Slow

3. Where should you place the email address of the person you are sending the message to?

- a. In the Subject line
- b. In the CC field
- c. In the "To" field
- d. At the end of the message

4. When writing an email, you must use:

- a. Emojis and slang phrases
- b. Correct grammar, greetings, and closings
- c. A lot of animated images (GIFs)
- d. Unclear words

5. What should you make sure is NOT in your background if the camera is on during a video chat?

- a. School textbooks
- b. Decorative plants
- c. A solid color
- d. Personal information or your home address

6. What action should you take if you want to join a video chat?

- a. Enter directly.
- b. Leave the room.
- c. Click on the link and wait to be allowed in.
- d. Turn off the camera immediately.

7. In chat rooms, who can read your messages?

- a. Only the person you sent the message to.
- b. Only you.
- c. Anyone who has access to the chat room.
- d. Only your teacher.

8. What is the primary purpose of using email?

- a. Sending entertainment symbols.
- b. More common formal situations.
- c. Quick and instant conversations.
- d. Sharing random video clips.

9. What should you do when using Instant Messaging (IM)?

- a. Use very formal and full sentences.
- b. Post information about others.
- c. Maintain high ethics when dealing with others.
- d. Send large files without prior notice.

10. Which part of the email should provide clear information about the content of the message?

- a. The "To" field.
- b. The "Subject" line.
- c. The greeting phrase.
- d. The message body.

Fourth Grade - Weekly Assessment and Assignments - Week (4)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 5: My Tools for Online Learning

Did you know that learning is no longer limited to the classroom? You can now learn, communicate with your teachers and peers, conduct experiments, and discover a wealth of information from your home! This is possible thanks to **Online Learning Environments and Sources**.

1. Online Learning Environments

Imagine that a learning environment is your classroom on the internet!

- **What are they?** These are platforms that allow teachers and students to communicate with each other, deliver lessons, and upload tests and homework.
- **Example:** The **Edmodo** platform.
- **How does it help us?** It enables you to communicate with your teacher, post your completed school assignments, and download lessons and tests provided by the teacher.



2- Online Learning Sources

If you are looking for new information, these sources are your massive libraries on the internet! We must always rely on **reliable sources**.

Source	Type & Benefits	Features
Egyptian Knowledge Bank (EKB)	A massive electronic library in Egypt.	Contains diverse sources and topics (articles, videos) in all fields.
Vlaby	An interactive virtual lab platform.	Enables students and teachers to conduct fun practical experiments, making learning interactive rather than just information.
Interactive Mapmaker	A free tool that works on tablets and laptops.	Provides tools for online mapping, allowing data collection and research using maps. (You can seek help from your teacher or Social Studies teacher).

Practical Application:

Dear Student:

With the help of your teacher, use one of the reliable digital sources to assist you in your learning.

Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- Online learning environments allow teachers to provide virtual lessons to students. ()
- 2- The Egyptian Knowledge Bank (EKB) is an example of a learning environment rather than a learning source. ()
- 3- **Vlaby** is a platform that allows students to conduct practical experiments in an interactive environment. ()
- 4- Reliable online sources are not important for research and data collection. ()
- 5- Students can use the **Edmodo** platform to communicate with their teachers and post their assignments. ()
- 6- The Egyptian Knowledge Bank (EKB) contains sources in English only. ()
- 7- You can use online learning environments to search for information about animals and science. ()
- 8- The **Interactive Mapmaker** is a tool for instant messaging between students. ()
- 9- Online learning is limited to reading written articles only. ()
- 10- Through the **Egyptian Knowledge Bank (EKB)**, you can research and view various topics. ()

Q2: Choose the correct answer:

Which of the following platforms is an example of an online learning environment?

- | | |
|-----------|-------------|
| a. Paint | b. Email |
| c. Edmodo | d. WhatsApp |

2. All of the following can be provided by online learning environments EXCEPT:

- | | |
|---|--------------------------------|
| a. Advanced mathematics lessons. | b. Practical experiments only. |
| c. Various topics such as animals, science, history, and geography. | d. Writing files. |

3. The primary feature of the Vlaby platform is that it allows students to:

- | | |
|---|-----------------------------------|
| a. Download school tests. | b. Communicate with parents only. |
| c. Conduct practical experiments in an interactive environment. | d. Read paper books. |

4. The Egyptian Knowledge Bank (EKB) is:

- | | |
|---|------------------------------------|
| a. An instant messaging application. | b. A tool for drawing images only. |
| c. The first electronic library in Egypt that contains diverse sources. | d. A program for running games. |

5. What is the purpose of using the Interactive Mapmaker?

- | | |
|--|--------------------------------------|
| a. Watching entertainment movies. | b. Making video calls. |
| c. Online mapping and research using data. | d. Downloading mathematics homework. |

6. What can teachers provide through learning environments like Edmodo?

- | | |
|---|--|
| a. Video games only. | b. Virtual lessons, and uploading tests and assignments. |
| c. Communication with school principals only. | d. Sending emails. |

7. What is the most important quality that digital learning tools should have?

- | | |
|-----------------------------|--|
| a. To be colorful. | b. To contain images. |
| c. To be reliable and safe. | d. To be designated for teachers only. |

8. You can access topics, articles, and videos in the Egyptian Knowledge Bank (EKB) by simply:

- | | |
|---------------------------------|-----------------------------------|
| a. Sending an official request. | b. Clicking on the source. |
| c. Visiting the school. | d. Using an external application. |

9. Online learning environments allow communication between teachers and students:

- | | |
|--|---|
| a. Only when they are in the same place. | b. Regardless of where they are located. |
| c. Via landline phone. | d. At specific times in the morning only. |

10. The Vlaby platform is classified as a platform that allows the student to:

- | | |
|----------------------|--------------------------------------|
| a. View images only. | b. Interact with scientific content. |
| c. Read texts only. | d. Use instant messaging. |

Fourth Grade - Weekly Assessment and Assignments - Week (5)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 6: Digital Research Skills Planning and Evaluating Sources

When you want to search for a new topic online, you shouldn't start searching right away! First, you must plan your research journey to collect the best information, then ensure that this information is accurate and reliable.

1. Planning Your Digital Research

Before you begin, think about these three steps:

1. **Choose Your Topic:** Think about your research subject (e.g., Dinosaurs, Space, or Environmental Protection).
 - **Define the Goal:** What basic information do you already know? What additional points do you want to learn? Write down some simple notes.
2. **Choose Your Sources:** Decide which types of sources you will use.
 - **Remember:** Digital research can include audio recordings, videos, and images—not just written text!
 - **Consult:** Don't hesitate to consult your teacher or parents about the valid sources you can use.
3. **Evaluate the Sources:** Be prepared to evaluate your sources. Are they reliable or not?

2. Evaluating Sources: Reliable vs. Unreliable

Reliable Sources (Good)	Unreliable Sources (Be Careful)
What are they? Articles or information written by experts and verified for accuracy.	What are they? You may find correct information, but it also contains opinions and lies.
Examples: Egyptian Knowledge Bank (EKB), official government websites, digital school textbooks.	Examples: Social media sites (Facebook), Blogs, and Wiki sites.
How to deal with them: They are presented professionally without linguistic errors. Take detailed notes and make sure to cite the source in your report.	How to deal with them: You must be extremely cautious when using information found in these sources.

Tip during research: Focus only on the topic you are searching for and do not get distracted. Always ask yourself: *Is this information reliable?*

3. Organizing and Writing Your Report

After collecting notes from reliable sources, it is time to write the report in a logical and organized manner.

- **Use an Outline:** Use a plan to organize your notes before you start writing. This outline will help you present information logically.
- **Main Parts of the Outline:** Your outline should include the following:
 1. **Introduction:** Introduces the topic of the report (What will you research?).
 2. **Supporting Paragraphs:** Present the information you found about the topic (Your research details).
 3. **Conclusion:** Final thoughts about the information you presented (What did you learn?).

Practical Application:

Dear Student: Using **Microsoft Word**, imagine you are researching the topic "The Importance of Environmental Protection." Write the necessary outline for your report, including:

1. **Introduction:** A sentence presenting the report topic.
2. **Three Supporting Paragraphs:** Write a subheading for each, such as: (Causes of environmental pollution, Our role in protection, Benefits of a clean environment).
3. **Conclusion:** A sentence summarizing the importance of the topic.



Exercises on Lesson

Q1: Put (✓) or (✗):

- 1-You should start your digital research by planning the topic and staying focused. ()
- 2-Reliable sources are those that provide professionally written information free of spelling errors. ()
- 3- The conclusion of a report presents the topic in detail. ()
- 4-Information found in blogs is always reliable and can be depended upon. ()
- 5- Supporting paragraphs in a report provide the information and data that were collected. ()
- 6-You should focus on searching for text sources only and ignore audio recordings and videos. ()
- 7- After finishing your research, you should use an outline to organize your notes in a logical way. ()
- 8- When you find information, you should ask yourself: "Is it reliable?" ()
- 9- There is no need to cite the source in your report, as information belongs to everyone. ()
- 10- You can consult your parents or teacher about reliable sources for your research. ()

Q2: Choose the correct answer:

1. What is the first step you should take before conducting any digital research?

- a. Start searching immediately.
- b. Planning, defining the topic, and focusing.
- c. Printing the report.
- d. Writing the conclusion.

2. What do we call the organized record of notes that helps you arrange your report ideas?

- a. Detailed report.
- b. Reliable source.
- c. An outline.
- d. Final conclusion.

3. Information found on social media sites is considered _____ sources.

- a. Reliable.
- b. Accurate.
- c. Unreliable.
- d. Professional.

4. What must you ensure you write in your notes when using a reliable source?

- a. Your personal opinion only.
- b. Unimportant information.
- c. Detailed, accurate notes and citing the source.
- d. Lies and the opinions of others.

5. Which part of the outline presents the ideas and information found during research?

- a. Introduction.
- b. Supporting paragraphs.
- c. Conclusion.
- d. Subject line.

6. Digital research can include non-text sources such as:

- a. Paper books.
- b. Videos and audio recordings.
- c. Regular mail letters.
- d. Outlines only.

7. Reliable sources must be written in a way that is:

- a. Slang and full of errors.
- b. Professional, careful, and without grammatical errors.
- c. Very short.
- d. Informal.

8. What should be the focus of the introduction when writing a report?

- a. Final research results.
- b. Briefly presenting the report topic.
- c. Unreliable sources.
- d. The final conclusion.

9. What should you do when you find information before you use it?

- a. Start writing immediately.
- b. Evaluate it and ensure it is reliable.
- c. Post it on social media.
- d. Mention your personal opinion only.

10. Who should you consult regarding valid sources for research?

- a. A friend who doesn't know the topic.
- b. An online blogger.
- c. Your teacher or the school librarian.
- d. A commercial advertisement.

Fourth Grade - Weekly Assessment and Assignments - Week (6)

Weekly assessment

Test

1-

2-

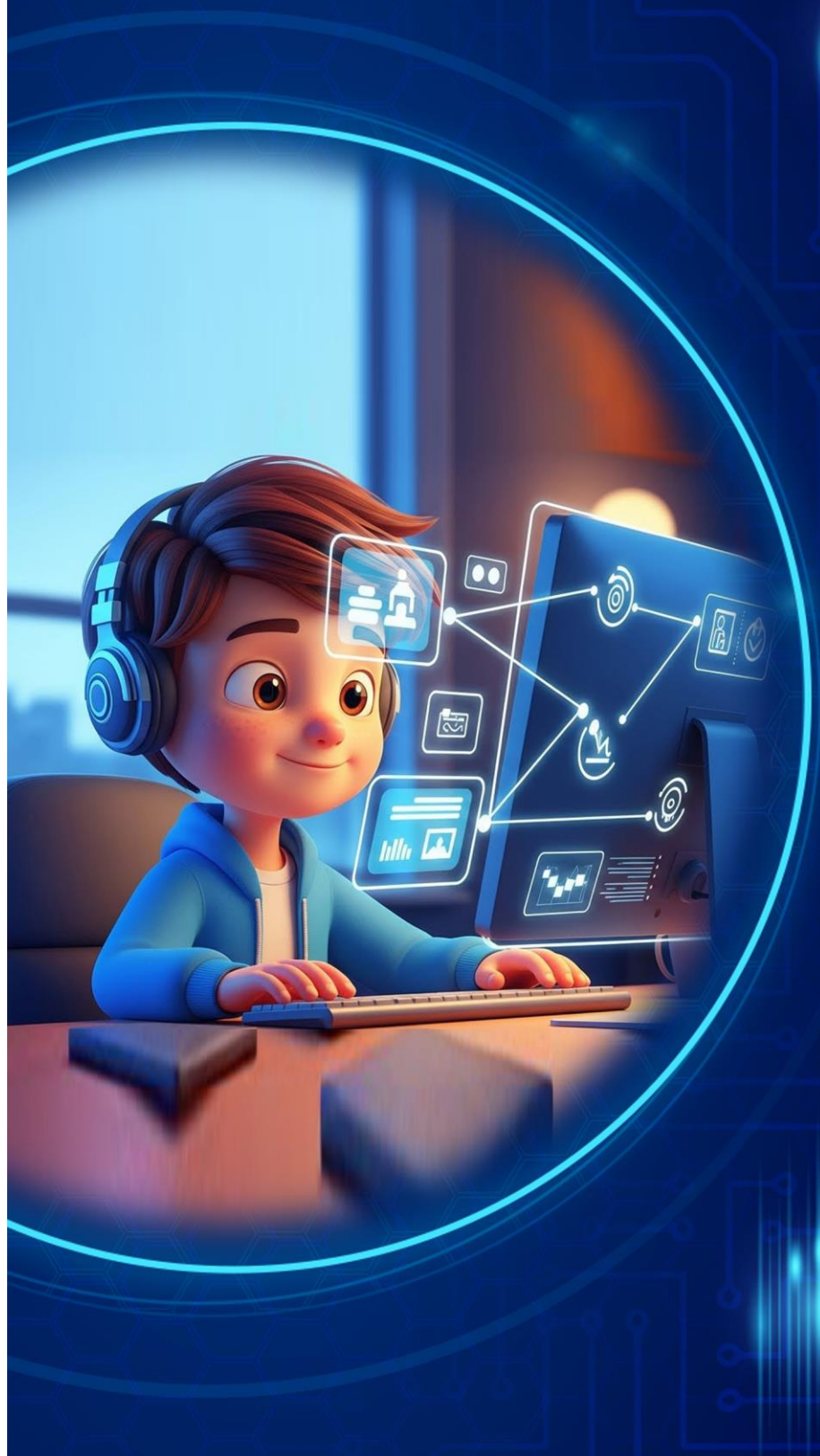
Class evaluation

Homework

1-

2-

Unit 4: My Digital Project



Lesson 1: Solving Digital Problems.

Just like in our daily lives, we may encounter small or large problems when using technology. Sometimes solving a problem seems difficult, but by taking organized steps, it becomes much easier!



1. Steps for Problem Solving

Solving technical problems requires logical thinking steps.

Step	What to do?	Why?
1. Build a Hypothesis	Make a scientific guess (a preliminary explanation) about how the problem occurred.	This guess is called a " Hypothesis. " It is the starting point you can test.
2. Test the Hypothesis	Test your guess, but do not take risks with anything that might put your device in danger.	Testing must be safe and well-thought-out.
3. Learn from Error	If your test fails, think: What went wrong? What did you learn?	We learn from our mistakes to build a new, more accurate hypothesis.

2. Breaking Down Problems into Small Parts

Some tech problems may seem complex, such as an internet connection failure or an app that won't open.

- **The Main Idea:** Divide the large problem into small parts, then solve each part gradually.
- **Real-life Example:** If you have a big task like "Organizing a class trip," it seems hard. But when you break it down into small tasks (choose the destination, set a date, ask for the price), it becomes much easier! This is the same principle we follow for major technical issues.
- **When Dividing a Tech Problem:** Start by solving the parts you can handle on your own, step by step, until the major problem is resolved.

3. Asking for Help

If a technical problem is too complex, never hesitate to ask for help:

1. **The Teacher is your source:** You can ask your teacher for help. At first, a task may seem huge, but asking for help will make dividing the problem into small tasks easier.
2. **Teamwork for Large Tasks:** If you have a group of people helping you, you can assign a small part to each person to solve separately.

Practical Application

Dear Student: Think of a problem you might face while using your device (Computer, Mobile Phone...) and how to solve it by applying the "Problem Breakdown" and "Hypothesis" methodology:

- **Build a Hypothesis (Guess):** Write one guess about the cause of the problem.
- **Divide the Problem:** Write two small steps you can take to solve the problem.

Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- Information and Communication Technology (ICT) problems seem easier when we break them down into small parts. ()
- 2- A hypothesis is the final and confirmed solution to how a problem occurred. ()
- 3- You should always try to solve technical problems by yourself without asking for help. ()
- 4- The problem-breakdown methodology can be applied to real-world problems, not just technology problems. ()
- 5- Testing a hypothesis should not involve any risk to the device you are using. ()
- 6- The teacher is a source of help in organizing and facilitating large tasks and problems. ()
- 7- When a hypothesis test fails, you should feel frustrated and stop trying. ()
- 8- If you have a group helping you solve a problem, each person should solve a small part of it. ()
- 9- A hypothesis is a scientific guess about how things happen, and it can be tested. ()
- 10- You do not need to take steps to solve technical problems; the solution comes automatically. ()

Q2: Choose the correct answer:

A scientific guess about how a problem occurred is called:

- | | |
|------------------------|-----------------------|
| a. The final solution. | b. An experiment. |
| c. A Hypothesis. | d. A partial problem. |

2. When a technology problem is very complex, the best strategy to solve it is:

- | | |
|--|---|
| a. Ignore it and look for another problem. | b. Divide it into small parts and solve them gradually. |
| c. Start solving it without thinking. | d. Ask for help from a random person. |

3. The goal of testing a hypothesis is to:

- | | |
|--------------------------------------|---|
| a. Prove that you were always right. | b. Find out if the hypothesis failed to learn from the error. |
| c. Put the device at risk. | d. Make the problem larger. |

4. When we have a large task at the beginning, how do we make it easier?

- | | |
|---|--|
| a. Leave it as it is. | b. Divide it into several small tasks. |
| c. Ask someone else to solve it completely. | d. Distract attention away from it. |

5. If your hypothesis test fails, what is the most important thing to learn?

- | | |
|--|------------------------------------|
| a. Not to build hypotheses ever again. | b. That you cannot solve problems. |
| c. What went wrong and how that helps you build a better hypothesis. | d. That the problem is unsolvable. |

6. What action should be avoided when testing your hypothesis?

- | | |
|-------------------------------|---|
| a. Building a new hypothesis. | b. Applying any test that might put the device in danger. |
| c. Dividing the problem. | d. Asking the teacher for help. |

7. In a task like organizing a trip, "choosing the destination" represents:

- | | |
|--|-----------------------|
| a. The hypothesis. | b. The major problem. |
| c. A small, divided part of the problem. | d. The final step. |

8. What should you do when facing a complex technology problem?

- | | |
|--------------------------------------|--|
| a. Try to solve it by yourself only. | b. Ask for help from your teacher or a specialist. |
| c. Give up on the problem. | d. Play games on the computer. |

9. When a group of people works on solving a large problem, how can the work be organized?

- | | |
|-------------------------------------|--|
| a. Everyone works on the same part. | b. Assigning a small part to each individual to solve. |
| c. No one participates. | d. One person solves everything. |

10. Solving problems requires:

- | | |
|------------------|--|
| a. Randomness. | b. Taking steps to think about and solve them. |
| c. Wasting time. | d. Reading novels. |

Fourth Grade - Weekly Assessment and Assignments - Week (7)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 2: Presenting Information.

When we want to present information or advertise an idea in an attractive way, we use digital tools to design posters or billboards. Let's learn about the tools and the rules of good design!

1. Digital Tools for Presenting Information

The **Microsoft 365** suite offers excellent options for designing posters and billboards:

- **PowerPoint:** Great for designing presentation slides quickly and easily.
- **Word:** Primarily used for writing text, but can also be used to design simple posters.
- **Publisher:** A professional program specifically for designing organized posters, newsletters, and advertisements.

Note: To access these programs, you must have the Microsoft 365 suite installed on your digital device. Ensure your device is updated to download and run the software properly.

2. Digital Concepts to Consider When Designing

To make your poster attractive and easy to read, you must consider these four key elements:

Concept	What does it mean?	Designer's Tip
Margins	The empty space around the edges of the poster or billboard.	Leave a consistent margin (e.g., 2.5 cm). If the edges are too full, the design will look crowded and unattractive.
Font Type & Size	How the text looks and how big it is so your audience can read it.	Simplicity is best. Avoid complex fonts that distract the viewer and are hard to read.
Colors	The palette used to deliver your message and catch the eye.	It is best to use no more than three colors in one poster. Always consider the background color when choosing your font color (use contrast).
Images	The visuals used to match and support your content.	Use clear, high-quality images that are directly relevant to your topic.

Practical Application:

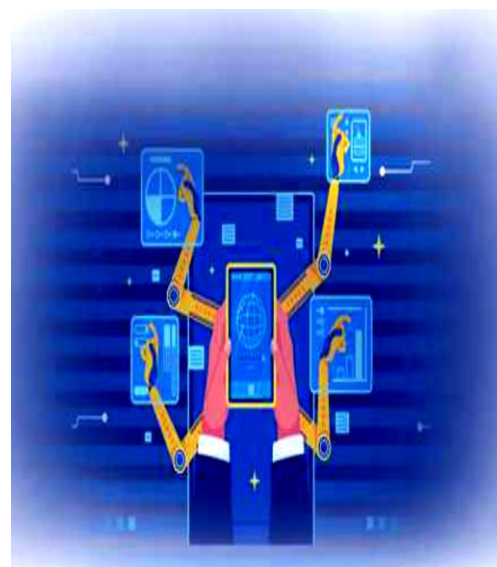
Dear Student: Design a digital poster about one of the following topics:

1. The Grand Egyptian Museum.
2. The importance of conserving resources.
3. Protecting the environment.

Instructions:

- Pay close attention to **Margins** (empty spaces).
- Focus on making the billboard organized and beautiful

by applying the tips above.



Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- Margins are the empty space left around the edges of a poster. ()
- 2- **Microsoft Publisher** is the best tool for designing professional posters. ()
- 3- It is preferable to use more than five colors in a design to make it attractive. ()
- 4- Choosing a complex font helps your audience read the information easily. ()
- 5- Images used in a poster must match the content and be of high quality. ()
- 6- To access the **Microsoft 365** suite, you need an updated digital device. ()
- 7- If the content is very close to the edges, the poster will look visually attractive. ()
- 8- Word processing software (**Word**) can also be used to design posters. ()
- 9- We do not need to pay attention to the background color when choosing the font color. ()
- 10- Images in a poster should be blurry to encourage the viewer to focus on the text. ()

Q2: Choose the correct answer:

1-Which tool is considered the best for designing a professional digital poster or billboard?

- a. Word Processor (Word).
- b. Presentation Software (PowerPoint).
- c. Desktop Publishing Software (Publisher).
- d. Mobile phone application.

2. What do we call the empty space left around the edges of a poster?

- a. Background.
- b. Colors.
- c. Margins.
- d. Font type.

3. What is the maximum number of colors recommended for use in a single poster?

- a. Five colors.
- b. Less than three colors.
- c. Ten colors.
- d. One color only.

4. If the font you use in a poster is complex, it:

- a. Catches the eye strongly.
- b. Distracts the viewer and is difficult to read.
- c. Increases the image quality.
- d. Makes it easier for the audience to read information.

5. When using images in billboards, it is important that the images are:

- a. Blurry.
- b. Irrelevant to the content.
- c. Clear, high-quality, and relevant to the topic.
- d. Full of a lot of text.

6. Word processing software (Word) is part of which software suite?

- a. Google Drive.
- b. Microsoft 365.
- c. Adobe Suite.
- d. Vlabby.

7. What is the visual drawback of adding content too close to the edges of the poster?

- a. The poster will look well-designed.
- b. The poster will look crowded and lack margins.
- c. It will increase the quality of the poster.
- d. It will make reading easier.

8. What should you ensure about your computer before downloading Microsoft 365?

- a. That it is very old.
- b. That it is not connected to the internet.
- c. That it is updated to handle the software being downloaded.
- d. That its font is very small.

9. When choosing colors, you must take into account the color of the:

- a. Computer device.
- b. Font type only.
- c. Background.
- d. Mouse.

10. In design, choosing a font that achieves _____ is generally preferred:

- a. Complexity.
- b. Ambiguity.
- c. Simplicity.
- d. Excessive detail.

Fourth Grade - Weekly Assessment and Assignments - Week (8)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 3: Algorithms.

Did you know that everything you do in your day is a series of steps? This series is called an **Algorithm**.

An algorithm is a finite set of clear instructions and sequential, organized steps used to solve a specific problem or complete a specific task.

Illustrative Example: Algorithm for Adding Two Numbers

1. **Start.**
2. Enter the first number (A).
3. Enter the second number (B).
4. Calculate the sum: $C = A + B$.
5. Display the result (C).
6. **End.**



Essential Characteristics of an Algorithm

A good algorithm must have the following properties:

1. **Definiteness (Clarity and Precision):** Every step must be clear and unambiguous.
2. **Input:** It must accept zero or more inputs.
3. **Output:** It must produce at least one output that represents the solution.
4. **Finiteness:** The algorithm must stop after a finite number of steps.
5. **Effectiveness:** Every step must be practically executable.

Algorithms and Search Engines

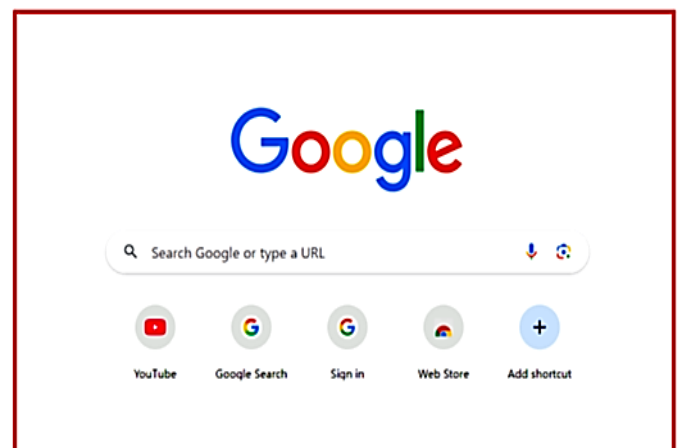
Computers and applications use algorithms to perform specific tasks, such as search engines:

- **Keywords:** Every time you enter keywords into a search engine, the engine uses algorithms to provide you with results.
- **Function of the Algorithm:** Algorithms help determine the results most relevant to your research topic.
- **Smart Algorithms:** For example, if you use a search engine to find directions to a place, the engine uses a database of names and information from digital maps to provide you with results.
- **Search Accuracy:** It is very important to choose the right words when collecting information. If your phrasing is not precise enough, the engine's algorithm might not be perfectly accurate in providing results.

Practical Application:

Dear Student: Write the algorithmic steps to calculate the sum of **three numbers** (you may work in groups).

1. **Start.**
2. Enter the first number (A).
3. Enter the second number (B).
4. Enter the third number (C).
5. Calculate the sum: $Sum = A + B + C$.
6. Display the result (Sum).
7. **End.**



Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- An algorithm represents a series of steps that explain how to perform a task. ()
- 2- Algorithms help determine search engine results that are the least relevant to your search topic. ()
- 3- Following a food recipe is considered a type of algorithm. ()
- 4- There is no need to choose the correct words when searching; the engine will always find the results. ()
- 5- An algorithm for solving a math problem requires breaking the question into parts. ()
- 6- When cleaning a room, you can start by cleaning the floor before dusting the surfaces. ()
- 7- When entering inaccurate keywords, the engine's algorithm remains highly accurate in all cases. ()
- 8- Search engines use map databases to provide you with directions to a specific place. ()
- 9- An algorithm is a set of random instructions. ()
- 10- Computers and their applications use algorithms to decorate the desktop. ()

Q2: Choose the correct answer:

1. What is the name of the series of steps that explains how to perform a specific task?

- | | |
|---------------|----------------------|
| a. Keyword. | b. Digital research. |
| c. Algorithm. | d. Database. |

2. What does a search engine use to determine the results most relevant to your research topic?

- | | |
|------------------|---------------------|
| a. Food recipes. | b. Spelling errors. |
| c. Algorithms. | d. Images only. |

3. When solving a verbal math problem, it often requires:

- | | |
|---------------------------|--|
| a. Ignoring the question. | b. Dividing the question into parts and solving it in a series of steps. |
| c. Using only one word. | d. Asking for help without trying. |

4. If you use a search engine to find directions to a place, the engine will use:

- | | |
|-------------------------|---|
| a. Your personal files. | b. A database of names and information found on digital maps. |
| c. Math questions. | d. Food recipes. |

5. What should you do to tell a search engine which task you want it to perform?

- | | |
|---------------------------|--------------------|
| a. Turn off the computer. | b. Enter keywords. |
| c. Clean your room. | d. Prepare a meal. |

6. What happens if the phrasing of keywords is not precise enough?

- | | |
|---|------------------------------------|
| a. The engine's algorithm remains very accurate. | b. The room gets better organized. |
| c. The engine's algorithm might not be perfectly accurate in providing results. | d. Devices stop working. |

7. A recipe for preparing a meal (like a falafel sandwich) is an example of:

- | | |
|-----------------------|-----------------------------------|
| a. A complex problem. | b. A type of algorithm. |
| c. A random result. | d. A random, unorganized process. |

8. What must you choose carefully when trying to collect information?

- | | |
|----------------------|---|
| a. Background color. | b. The correct words you are searching for. |
| c. Bedtime. | d. Furniture in the room. |

9. What is a logical first step in an algorithm for cleaning a room?

- | | |
|---------------------|-----------------------|
| a. Clean the floor. | b. Dust the surfaces. |
| c. Mop the floor. | d. Leave the room. |

10. Computers and their applications use algorithms to:

- | | |
|---------------------|-----------------------------------|
| a. Decorate a room. | b. Perform specific tasks. |
| c. Cook food. | d. Send unwanted messages (Spam). |

Fourth Grade - Weekly Assessment and Assignments - Week (9)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 4: Lesson 4: Programming – Computer Language and Game Development.

Hello friends! Can you imagine being able to speak the computer's language? This language is called **Coding**, and it is like writing a very large recipe!

- **Programming:** It is the process of writing multiple algorithms to create a complete program.
- **Algorithms:** These are the instructions and steps that tell the computer exactly what to do, just like the steps for solving a math problem.



Programming in the Tech World

Look around and think about the things you use every day:

- **Entertainment:** All the animations and movies you've watched, and the video games you've played online, were created and designed using programming.
- **Creativity:** You too can create your own animations, movies, and video games using **Coding**.
- **Smart Devices:** Computers and applications use algorithms (which are the foundation of programming) to perform specific tasks.

Computational Thinking and Problem Solving

Programming teaches you how to think logically to solve problems. When you code, you provide detailed instructions to the computer:

- **Solving a Maze:** Have you ever tried to solve a maze? Programming requires you to think in sequential steps that allow the computer to navigate through that maze.
- **Example:** When solving a maze, the programming instructions look like: "Move two steps up," "Turn one step to the left," and so on.
- **Helpful Tools:** There are many websites that help you learn programming, such as **Code.org**.

Practical Application:

Dear Student: Explore the **Code.org** website to start learning how to code (you can ask your teacher for help).

Exercises on Lesson

Q1: Put (✓) or (✗):

1. Programming (Coding) consists of writing multiple algorithms to create a complete program. ()
2. Movies and animations were not created using programming. ()
3. Algorithms are the foundation of programming and serve as instructions for the computer. ()
4. You can create video games using programming code. ()
5. The website **Code.org** is an example of a site that helps you learn programming. ()
6. Programming cannot be used to solve mazes or problems that require sequential steps. ()
7. When solving a math problem, you are using algorithms. ()
8. When you program, you are providing detailed instructions to the computer program. ()
9. Programming does not help us think logically to solve problems. ()
10. Programming is a very difficult language and children cannot learn it. ()

Q2: Choose the correct answer:

1. What is the process of writing multiple algorithms to create a complete program called?

- a. Calculation.
- b. Programming (Coding).
- c. Cleaning.
- d. Planning.

2. What has been created using programming?

- a. Food recipes only.
- b. Animations, movies, and online video games.
- c. Falafel patties.
- d. Home furniture.

3. Programming helps us learn an important strategy for solving:

- a. Random puzzles.
- b. Food recipes.
- c. Problems.
- d. Unsolvable mazes.

4. What are the instructions and steps that tell the computer what to do called?

- a. Helper programs.
- b. Computer language.
- c. Algorithms.
- d. Secret code.

5. Which website can help you learn how to code?

- a. Facebook.
- b. Code.org.
- c. Google Maps.
- d. Microsoft Word.

6. When solving a maze, programming requires thinking about:

- a. Random paths.
- b. Sequential steps to pass through the maze.
- c. Exiting without following steps.
- d. Turning off the computer.

7. What does the term "Coding" mean?

- a. Reading.
- b. Handwriting.
- c. Programming.
- d. Coloring.

8. When computers use algorithms, they perform:

- a. Any task.
- b. Specific tasks.
- c. Random movements.
- d. Sleeping.

9. What must you provide to a computer program to solve a maze?

- a. Personal notes.
- b. Images from the internet.
- c. Instructions (guidelines) on how to solve it.
- d. Food recipes.

10. Programming is the computer's language that enables us to:

- a. Destroy games.
- b. Innovate and create games and movies.
- c. Disable devices.
- d. Send emails only.

Fourth Grade - Weekly Assessment and Assignments - Week (10)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 5: Exploring the Scratch Program

Are you ready to be a programmer? Imagine you are an orchestra conductor, and the instruments are your characters on the screen. You decide when they move, when they speak, and when they sing! Many

applications use the **Block-Based Coding** style, especially for teaching children.



. Famous Block-Based Platforms

1- **Scratch:** A programming language designed specifically for your age. Its mission is to turn ideas into interactive stories and games with extreme ease.

2- **Tynker:** 

A learning environment for youngsters to teach the basics of programming. It offers a wide range of projects and classrooms. It starts with block-based coding and then transitions to real text-based languages like **Python** and **JavaScript**.

○ Website: <https://www.tynker.com>

3- **Blockly:** 

An open-source visual programming language. The user assembles coding blocks together to solve puzzles and complete tasks. It can be integrated with other languages like Python.

○ Games Link: <https://blockly.games>

2. Let's Explore Scratch

How Scratch Works

Scratch relies on a system of **Blocks** instead of writing difficult symbols and words.

1. **Blocks are Commands:** Each colored block represents a ready-made command, such as: "Move," "Say," or "Play Sound."
2. **Assembly:** You drag these blocks and snap them together, just like connecting colorful building bricks to create a complete structure.
3. **Scripts:** A group of blocks connected together is called a **Script**. The script provides instructions to the **Sprite** (the character or shape on the screen).

3. How to Start Scratch

You can start using Scratch easily in two ways:

1. **Online:** Go to the official Scratch website: [Scratch Editor](https://scratch.mit.edu/projects/editor/?tutorial=getStarted).

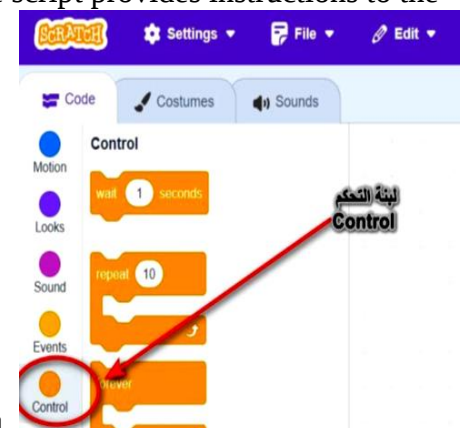
You can ask your teacher for help.

<https://scratch.mit.edu/projects/editor/?tutorial=getStarted>

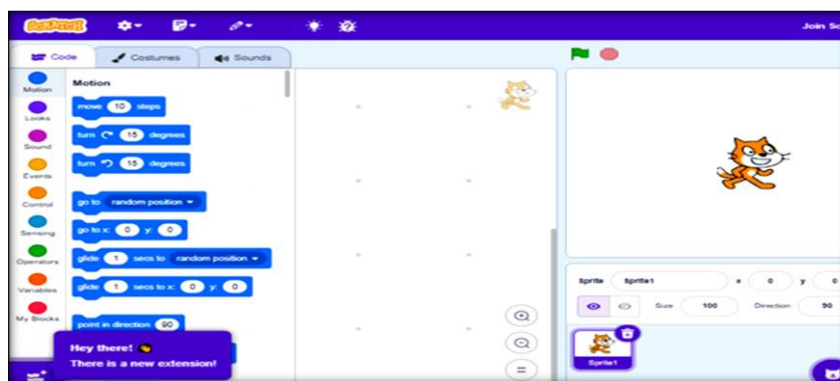
2- **Download:** You can download the application to your computer to work offline without needing the internet.

Practical Application:

Dear Student: Open the Scratch editor and try to drag a "Move" block and a "Say Hello" block. Snap them together and click on them to see what your **Sprite** does!



Sections of the Scratch Interface

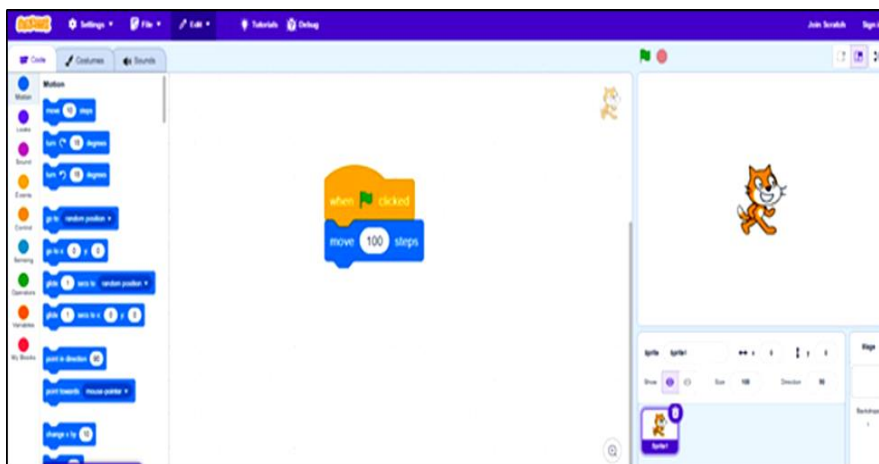


When you open the program, you will find the screen divided into three main sections that help you build your project:

No.	Section Name	Function
1	Stage	This is the display screen! It is the place where your final project appears. Sprites move and interact here.
2	Blocks Palette	This is the library that contains all the colored commands (Motion, Looks, Sound, etc.).
3	Scripts Area	This is your workspace! Here you drag blocks and snap them together to form commands.

The Default Sprite: The first character you see in Scratch is the **Scratch Cat Sprite**. He is ready and waiting for your commands!

Time to Work! Let's Apply Basic Commands



Exercise 1: Basic Motion

Goal: Make the cat move 100 steps when the start button is clicked.

1. **Starting:** From the **Events** category (yellow), drag the block "when green flag clicked".
2. **The Command:** From the **Motion** category (blue), drag the block "move 10 steps". Change the number to **100** and snap it under the start block.
3. **Run:** Click the green flag above the stage and watch the cat move!

Practical Application:

Dear Student: Add **Speech** and **Sound** using block programming in Scratch.

Follow these steps:

1. **To Speak:** Go to the **Looks** category (purple) and drag the block "say Hello! for 2 seconds". Snap it under your motion blocks.
2. **To Add Sound:** Go to the **Sound** category (pink) and drag the block "play sound Meow until done". Snap it into your script.
3. Click the **Green Flag** and see how your cat moves, talks, and makes a sound all at once!

Exercises on Lesson

Q1: Put (✓) or (✗):

1. Scratch uses text-based programming like Python. ()
2. Blocks in Scratch help students program without writing code. ()
3. A sprite in Scratch can move, speak, and make sounds. ()
4. It is not possible to change the appearance of a sprite in Scratch. ()
5. Tynker does not support the JavaScript language. ()
6. The Blocks Palette contains ready-made commands. ()
7. The Stage is the area where we build the programming blocks. ()
8. A Scratch project can be started by clicking the green flag. ()
9. New sounds cannot be added in Scratch. ()
10. Scratch is suitable for children learning to program. ()

Q2: Choose the correct answer:

1. What is the basic system that Scratch relies on instead of writing difficult text-based codes?

- | | |
|----------------------------------|---------------------------------|
| a. Complex Cipher System. | b. Block-Based System (Blocks). |
| c. Mathematical Equation System. | d. Drop-down Menu System. |

2. Which of the following sections in the Scratch interface is where your final project result appears (the display screen)?

- | | |
|------------------|---------------------|
| a. Scripts Area. | b. Blocks Palette. |
| c. The Stage. | d. Sprites Library. |

3. What is the term for a group of blocks connected together that give commands to a Sprite?

- | | |
|----------------|-----------------|
| a. The Sprite. | b. The Block. |
| c. The Script. | d. The Command. |

4. Sound commands are found in the _____ area?

- | | |
|--------------------|-------------|
| a. Stage. | b. Scripts. |
| c. Blocks Palette. | d. Display. |

5. Which of the following block-based programming applications also supports text languages like Python and JavaScript?

- | | |
|------------------------|-------------|
| a. Scratch. | b. Tynker. |
| c. Daisy the Dinosaur. | d. Blockly. |

6. In which block category can you find the "move 100 steps" block?

- | | |
|---------------------|-------------------|
| a. Events (Yellow). | b. Motion (Blue). |
| c. Looks (Purple). | d. Sound (Pink). |

7. What is the default sprite (the first character) that appears when opening Scratch?

- | | |
|---------------------|--------------|
| a. A soccer ball. | b. A wizard. |
| c. The Scratch Cat. | d. A horse. |

8. Which block category contains the "when green flag clicked" block, which represents the starting block?

- | | |
|--------------------|----------------------|
| a. Looks category. | b. Control category. |
| c. Sound category. | d. Events category. |

9. What is the purpose of adding "move 20 steps"?

- | | |
|-------------------------------------|------------------------------------|
| a. To repeat the movement twice. | b. To move the sprite by 20 steps. |
| c. To make the sprite play a sound. | d. To make the sprite say hello. |

10. Which of these applications is considered an open-source visual programming language that can be integrated with other languages like Python?

- | | |
|------------------------|-------------|
| a. Movie Maker. | b. Blockly. |
| c. Daisy the Dinosaur. | d. Paint. |

Fourth Grade - Weekly Assessment and Assignments - Week (11)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Lesson 6: Graphic Art – Creating and Editing Images

Do you love drawing and coloring? In the world of technology, we can do this using computer software, and this is called **Graphic Art**.

Graphic Art: It is the creation and modification of digital images and drawings.

Our Graphic Art Tools

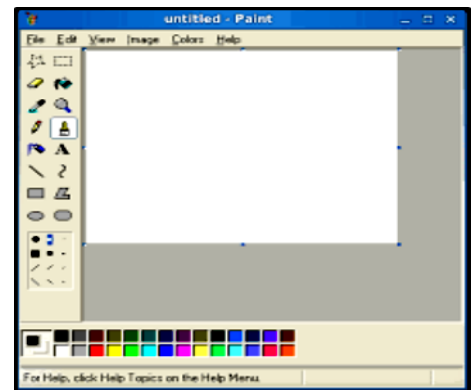
To create your own drawings or edit your photos, there are common programs you can use:



1. Microsoft Paint

This program is one of the most common applications on computers that makes it easy to create drawings or edit images.

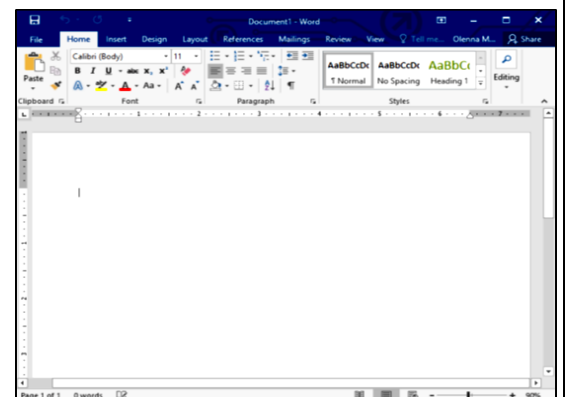
- **Where to find it?** You can open it from the **Start menu**, then search for **Accessories**.
- **The Interface:** When you open the program, you will find the **Menu bar** and the **Toolbox**, which contains all the tools you need for drawing and coloring.



2. Microsoft Word

Even this program provides graphic tools to design elements such as: **Shapes, Icons, 3D Models, and Charts**.

- **How to access them?** Go to the **Insert** tab in the **Menu bar**.



Important Image Edits in Paint

Using Microsoft Paint, you can modify and edit images as follows:

1. **Cropping:** The process of selecting specific parts of the image you want to keep and cutting away the rest.
2. **Adding Text:** To add text to an image, you can click on its bottom-right corner and drag the mouse to create a white space for writing.
3. **Changing Colors and Size:** You can fill in colors using the dedicated bucket tool. You can also resize the image or change its orientation (Rotate).

Practical Application:

Dear Student: Using Microsoft Word or any other writing program, write a short paragraph about: "**The importance of Cropping in image editing, and how it helps the designer focus on a specific part of the image.**"

- Mention why you might need to crop a photo you took with your mobile phone.
- Explain how cropping helps make the final image more beautiful and more focused on the subject.

Exercises on Lesson

Q1: Put (✓) or (✗):

- 1- Microsoft Paint is used to create drawings and edit images. ()
- 2- The process of selecting specific parts of an image to cut away the rest is called **Cropping**. ()
- 3- Word processing software (**Word**) cannot be used to add graphic elements like shapes. ()
- 4- To add text to an image in Paint, a white space must be created to write the text. ()
- 5- Common programs for editing images and graphics are only available on mobile phones. ()
- 6- You can change the size or orientation of an image using Microsoft Paint. ()
- 7- Graphic design tools in **Word** can be accessed from the **Insert** tab. ()
- 8- When you open Paint, you will find the available tools in the Menu bar and the Toolbox. ()
- 9- Algorithms are the main tools used in the Paint program. ()
- 10- It is not possible to fill colors using the dedicated options in Microsoft Paint. ()

Q2: Choose the correct answer:

1. Which of the following is a common program used for editing images and drawings?
 - a. Microsoft Publisher.
 - b. Microsoft Paint.
 - c. Google Chrome.
 - d. Microsoft Excel.
2. What is the process of selecting specific parts of an image to use and cutting away the rest called?
 - a. Coloring.
 - b. Cropping.
 - c. Inserting.
 - d. Erasing.
3. Where can you find graphic tools such as shapes and icons in Microsoft Word?
 - a. In the taskbar.
 - b. In the Start menu.
 - c. In the File tab.
 - d. In the Insert tab of the Menu bar.
4. When you open Microsoft Paint, you can find the available editing tools in:
 - a. The search engine.
 - b. The Menu bar and the Toolbox.
 - c. The Settings menu.
 - d. Microsoft Publisher.
5. What should you drag when adding text to an image in Microsoft Paint?
 - a. The close button.
 - b. The mouse pointer to the right.
 - c. The menu bar.
 - d. The entire image.
6. Microsoft Paint is considered part of the:
 - a. Internet browsers.
 - b. Electronic games.
 - c. Accessories in the Start-up menu.
 - d. Search engines.
7. Microsoft Word can help design graphic elements such as:
 - a. Email.
 - b. Map databases.
 - c. Shapes and charts.
 - d. Video chats.
8. What can you change on an image using Microsoft Paint?
 - a. Change the entire subject of the photo.
 - b. Change the image size or orientation.
 - c. Change computer settings.
 - d. Change the designer's name.
9. To open Microsoft Paint, you look for it in the:
 - a. Tools menu.
 - b. Start-up menu.
 - c. Files menu.
 - d. Presentations menu.
10. Graphic Art is a field related to:
 - a. Writing long texts.
 - b. Creating and editing digital images and drawings.
 - c. Sending emails.
 - d. Solving mathematical problems.

Fourth Grade - Weekly Assessment and Assignments - Week (12)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-

Fourth Grade - Weekly Assessment and Assignments - Week (13)

Weekly assessment

Test

1-

2-

Class evaluation

Homework

1-

2-